

AMENDMENTS TO THE CLAIMS

Claims 1-21 (canceled)

22. (New) A tubing conveyed drilling assembly for use in drilling of a wellbore, comprising:

(a) a drilling motor for generating a rotary force in response to the flow of a drilling fluid through the drilling motor;

(b) a steering device for controlling the drilling direction of the drilling assembly, said steering device including:

(i) a plurality of force application members arranged around and extending radially outward from the steering device, each said force application member adapted to apply an adjustable amount of force to the wellbore inside, upon the application of power thereto;

(ii) a common power unit operably coupled to said force application members, said common power unit being disposed uphole of said drilling motor and supplying power to an associated said force application members;

(iii) a separate control device associated with each said force application member for controlling the power provided to each associated said force application member; and

(c) at least one conductor placed along a length of the tubing for providing one of (i) power, and (ii) two-way data transmission to the drilling assembly.

23. (New) The drilling assembly according to claim (22) further comprising at least one sensor configured to measure one of (i) a formation parameter, (ii) a borehole parameter, (iii) a drilling motor parameter; and (iv) drilling direction.

24. (New) The drilling assembly according to claim (22) further comprising a control unit

for controlling said control unit in response to formation parameter measurements provided by at least one sensor, wherein said at least one conductor provides two-way data transmission between said control unit and said at least one sensor.

25. (New) The drilling assembly according to claim (22) wherein said control unit is located at a surface location.

26. (New) The drilling assembly according to claim (22) further comprising a separate hydraulic line for each said force application member running through said drilling motor for providing hydraulic power to each said force application member.

27. (New) The drilling assembly according to claim (22) wherein there are no electronic connections inside the steering device.

28. (New) The drilling assembly according to claim (22) further comprising:

- (a) a control unit for providing directional control to the steering unit;
- (b) a directional sensor for measuring one of (i) azimuth, and (ii) inclination;
- (c) a formation sensor for measuring one of (i) resistivity, (ii) gamma rays, (iii) porosity, and (iv) density; and (v) wherein said control unit provides said directional control by using said directional measurements and said formation measurements according to a predetermined directional model.

29. (New) The drilling assembly according to claim (22) wherein said drilling motor includes a power section and a bearing section.

30. (New) The drilling assembly according to claim (29) wherein said force application members are arranged around said bearing section.

31. (New) The drilling assembly according to claim (22) wherein said power is provided from the surface via said conductors.

32. (New) The drilling assembly according to claim (22) wherein said data transmission to the surface via said conductors.

33. (New) A method for drilling a wellbore, comprising:
- (a) providing a drilling assembly conveyed into the wellbore by a tubing and having a drilling motor for generating a rotary force in response to the flow of a drilling fluid through the drilling motor;
 - (b) providing a plurality of force application members arranged around and extending radially outward from the drilling assembly, each force application member being adapted to apply an adjustable amount of force to the wellbore inside, upon the application of power thereto;
 - (c) supplying power to the plurality of force application members with a common power unit operably coupled to the force application members, the common power unit being disposed uphole of the drilling motor;
 - (d) controlling the power provided to each of the force application members with a separate control device associated with each force application member; and
 - (e) providing one of (i) power, and (ii) two-way data transmission to the drilling assembly using at least one conductor placed along a length of a tubing.
34. (New) The method according to claim (33) further comprising measuring with at least one sensor a parameter selected from one of (i) a formation parameter, (ii) a borehole parameter, (iii) a drilling motor parameter; and (iv) drilling direction.
35. (New) The method according to claim (33) further comprising providing a control unit for controlling the force application member in response to formation parameter measurements provided by the at least one sensor, wherein the at least one conductor provides two-way data transmission between the control unit and the at least one sensor.
36. (New) The method according to claim (33) wherein the control unit is located at a surface location.

37. (New) The method according to claim (33) further comprising providing a separate hydraulic line for each force application member running through the drilling motor for providing hydraulic power to each force application member.

38. (New) The method according to claim (33) further comprising:

- (a) providing directional control to the drilling assembly with a control unit;
- (b) measuring with a directional sensor one of (i) azimuth, and (ii) inclination;
- (c) measuring with a formation sensor one of (i) resistivity, (ii) gamma rays, (iii) porosity, and (iv) density; and wherein the control unit provides the directional control by using the directional measurements and the formation measurements according to a predetermined directional model.

39. (New) The method according to claim (33) wherein the drilling motor includes a power section and a bearing section.

40. (New) The method according to claim (33) wherein the force application members are arranged around the bearing section.

41. (New) The method according to claim (33) wherein the power is provided from the surface via the conductors.

42. (New) The method according to claim (33) wherein the data transmission is with the surface via the conductors.